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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,306	07/30/2003	Jeffery S. Blackburn	5702-01043	1883
26659	7590	03/18/2004	EXAMINER	
DINNIN & DUNN, P.C. 2701 CAMBRIDGE COURT, STE. 500 AUBURN HILLS, MI 48326			ILAN, RUTH	
			ART UNIT	PAPER NUMBER
			3616	
DATE MAILED: 03/18/2004				


Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/631,306

Applicant(s)

BLACKBURN, JEFFERY S. 

Examiner

Ruth Ilan

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-14 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "34". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. Additionally, in Figure 7 : "36" is not pointing to the hook member.
2. The drawings are objected to because the numbers are handwritten and messy. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The abstract of the disclosure is objected to because it is more than 150 words. Correction is required. See MPEP § 608.01(b).
4. The disclosure is objected to because of the following informalities: on page 7, lines 8, 9, and 14, the reference number "20" is used to describe the flange. This is an error because "20" has already been used to describe the attachment member. On page 7, line 12, "adhesive 54" should be "adhesive 56".

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 4-6 and 10-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The disclosure is so confusing regarding the location of the application of the adhesive that it is not known where the "interface" is. See especially page 7, the second and third paragraph. The glue is described as being installed between the cap flange and the base peripheral flange, but the drawings show that is located on the underside of the cap flange (see Figure 3.)

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 11 recites the limitation "protruding portion" in line 9. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 10, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmucker et al. (US 5,525,306.) Schmucker et al. teaches a gas generator including a housing with a base (4) and a cap (5) that are rotatably and adhesively secured (see col. 3, lines 18 and 55.)

11. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Bernau et al. (US 5,753,852.) Bernau et al. teaches a gas generator including a housing with a base (3) and a cap (2) that are rotatably secured (see col. 2, lines 42-44, and Figure 2A.)

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmucker et al. (US 5,525,306) in view of Hill (US 4,590,041.) Schmucker is discussed above, and further teaches an annulus (at 29) formed centrally and disposed radially in the cap and an igniter within the annulus. Schmucker fails to teach that the igniter is

adhesively fixed within the annulus. Hill teaches adhesively fixing an igniter within the annulus (col. 3, line 55) in order to provide a seal. It would have been obvious to one having ordinary skill in the art at the time of the invention to include an adhesive fixing the igniter of Schmucker et al., as taught by Hill, in order to provide a seal for the joint between the igniter and the cap.

14. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmucker et al. (US 5,525,306) in view of Bornheim et al. (US 6,655,289 B1.) Schmucker et al. is discussed above, and teaches all elements of the claimed invention, but does not disclose a bar code. Bornheim et al. teaches (col. 5, lines 38-45) that it is useful to include a bar code on an initiation device housing in order to have a convenient place for relevant data. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the housing of Schmucker et al. to include a bar code, as taught by Bornheim et al. in order to have a convenient location for relevant data.

15. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernau et al. (US 5,753,852.) Bernau et al. teaches a gas generator including a housing with a base (3) and a cap (2) that are rotatably secured (see col. 2, lines 42-44, and Figure 2A.) The cap includes a peripheral edge (shown with seal element 32 on top of it in Figure 2A) including protruding portions (portion of 11 on top of indent 11e) and the base includes hook members (11d). Bernau et al. does not show the details or other views of the bayonet connection, and as such does not specifically disclose that there are a plurality of these corresponding protrusions and hooks spaced about the cap and

base. The Examiner takes Official Notice that it is known in the art that rotary bayonet connections include a plurality of such corresponding elements, and that along with the protrusions are corresponding recessed portions and that the connection works by aligning the hooks with the recessed portions, and then turning until the protrusions have been slidably engaged with the hooks. It would have been obvious to one having ordinary skill in the art at the time of the invention that the connection of Bernau et al. would have included a plurality of such elements, in order provide a locking connection.

16. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernau et al. (US 5,753,852) in view of Hill (US 4,590,041.) Bernau et al. is discussed above, and further teaches an annulus (at 38, bottom of 6, see Figure 1) formed centrally and disposed radially in the cap and an igniter within the annulus. Bernau fails to teach that the igniter is adhesively fixed within the annulus. Hill teaches adhesively fixing an igniter within the annulus (col. 3, line 55) in order to provide a seal. It would have been obvious to one having ordinary skill in the art at the time of the invention to include an adhesive fixing the igniter of Bernau et al., as taught by Hill, in order to provide a seal for the joint between the igniter and the cap.

17. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernau et al. (US 5,753,852) in view of Bornheim et al. (US 6,655,289 B1.) Bernau et al. is discussed above, and teaches all elements of the claimed invention, but does not disclose a bar code. Bornheim et al. teaches (col. 5, lines 38-45) that it is useful to include a bar code on an initiation device housing in order to have a convenient place for relevant data. It would have been obvious to one having ordinary skill in the art at the

time of the invention to modify the housing of Bernau et al. to include a bar code, as taught by Bornheim et al. in order to have a convenient location for relevant data.

***Allowable Subject Matter***

18. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Steiger teaches the equivalence of bayonet joints and threaded joints in gas generator connections. Hawkins teaches that it is known to provide bayonet joints in gas generator housings. Hayashi et al. teaches that screwed, adhesive and welded connections between caps and bases of gas generators are equivalent methods known in the art. Jones and Cuevas teach a bayonet joint of interest. Furst et al. teaches an adhesively joined housing of interest. Tieu teaches a rotatably fixed connection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth Ilan whose telephone number is 703-306-5956. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 3616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth Ilan  
Examiner  
Art Unit 3616

*Ruth Ilan*  
3/16/04

RI  
3/16/04